



Determinant of the Financial Performance of the Banking Sector in Nigeria

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General Note



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ABSTRACT

There is a strong relationship between the financial performance deposit money banks (DMBs) and the macroeconomic environment in which the banks operate. Hence, understanding the extend to which those macroeconomic variables affect the financial performance of the DMBs in Nigeria is very crucial to the survival of Nigerian economic. This study therefore, determined the effect of inflation rate, interest rate, exchange rate, unemployment rate and GDP on the financial performance of deposit money banks in Nigeria from 1990-2019. Using STATA 13, the study revealed that only inflation rate and GDP negative but significantly affect the financial performance of DM banks within the period under investigation. The study therefore recommend that Banks management should make both long and short terms policies that can aid to mitigate the effect of the macroeconomic environment on their financial performance. Government/ regulatory body should make policies that will reduce the rate of inflation in Nigeria in order to boost the financial performance of organizations like banks. They should also make policies that can encourage investments in the country thereby enhance the country's GDP among others). It is a time series study.

Keywords: Determinant, financial performance, deposit money banks.

1. INTRODUCTION

Bank is a financial institution where one can place and borrow money for any economy venture; it is institutions that mostly take care of financial affairs. It is a place that guaranteed storage of valuables as well as the retrieval of such valuables. Banks are also seen as the mechanism use for mobilizing financial resources as well as allocating those resources for productive investment which lead to the development of the economy (Sanusi, 2011).

Olushola and Uzoma, (2018) assert that financial sector is the prime mover of economic development which mobilizes savings from surplus to deficit economic unit. This financial sector is housed by the banking industry. The ability of banks to encourage economic growth and development depends on the soundness and well-being of the system (Olushola & Uzoma, 2018; Adewuyi, 2011). The soundness of the banking institution is mostly determined by the external environment (also Known as macroeconomic environment) in which the bank operate. This environment is control by variables that are not within the control of the various banks and they can either strengthen or weaken the industry depending on the measures put in place by the managers of the various banks or the regulatory body. The banking industry in Nigeria is highly regulated, the purpose of the regulation is to ensure standard and compliance to government programs/policies.

The drive to ensure the soundness of banks in Nigeria has led to the initiation and implementation of various reforms or regulation programs. Adeyemi (2006) observed that in Nigeria, the banking industry is the most regulated industry because of its importance to the nation's economy. The regulations mostly come in form of consolidation. The first consolidation exercise in the industry took place in 2005, it was carried out by the then Governor of Central Bank of Nigeria, Prof. Charles Soludo. The exercise reduced the number of banks in Nigeria from ninety (90) to twenty-four (24). The purpose of the reform was to make sure that banks in Nigeria are bigger and stronger so that they can withstand the challenges post by the macroeconomic environment. However, the exercise led to the problem of few banks dominating the market share in the industry. Macroeconomic instability has continued to hinder the development of the financial sector In Nigeria (Olushola & Uzoma, 2018; Nnanna, & Dogo, 1998). The impacts of this macroeconomic environment can either developed the economy and open it for investors or under-develop it. The variables of the external environment include gross domestic product (GDP), interest rate, unemployment rate, inflation rate and exchange rate.

The recent happening in Nigeria since 2015 to date suggest that the variables that constitute the macroeconomic environment has been dovetailing to the negative direction despite the effort of the present administration to push it to the positive side. The report of various national and international bodies buttressed the fact that the macroeconomic environment in Nigeria is not doing well and the effect of such negative performance is felt by the various industries in the country especially the banking industry. For instance, the present Director General of Lagos chamber of commerce international (LCCI), DrMuda Yusuf observed that 80% of businesses have been disrupted by the economy policies of Central Bank of Nigeria (CBN) from 2015 to date(Vanguard newspaper, 1stSeptember, 2020). Another issue that is crippling the Nigeria economy is the increasing borrowing by the Government. Concerns has been raised by economist analysts about the alarming increase of Nigeria debts and it effect on the economy. Nigeria foreign debt has risen from \$10.32 billion in 2015 to \$27.6 billion in 2020(Vanguard Newspaper, 1st September 2020; Leadership Newspaper, 1st September 2020).This increment is worrisome when we consider the increase in the amount set aside in each Nigeria budget to service debts each year and the negative effect it has on Nigerian currency.

The recent recessions in Nigeria as well as the ongoing novel COVID 19 pandemic ravaging the whole world have also affected the Nigerian economy badly, it made some banks and other businesses to close down some of their branches thereby retrenched their staff in order to either make profit or break even. This has increased the rate of unemployment in Nigeria to 27.1% (National Bureau of Statistics). These and many other unfavorable economy policies have left a lot of questions on the minds of economic experts on the future of Nigeria. It is on this bases that this study would investigate the determinant of the financial performance of banks in Nigeria using return on asset (ROA) as the proxy for financial performance from 1990-2019.

Conceptual and theoretical reviews

The conceptual review focus oneach variable used for the study andit effect on financial performance. The review are as follows:

Inflation rate and financial performance: - The consumer price index sees inflation as the annual percentage change in the cost of a basket of goods and services that may be fixed or charged at a specific interval such as monthly, quarterly or yearly. The inflation rate in Nigeria increased to 12.82% in August, 2020(NBS report 2020). This is the highest rate of inflation for the past two (2) years. Economic analysts assert that the increased is as a result of the border closure and COVID 19 pandemic which disrupt the supply of goods even though some economic analysts opposed that view. Most of the studies reviewed for this research work assert that inflation rate does not determine financial performance except Kanwal and Nadeem (2013) and Gonji, Ahan, Zamdayu and Pam,

(2020). Example of this scholars include Ayande, Ekpo and Mustapha (2013), Khan, Kausar and Abbas (2015), Babalola (2012), Kamran, Johnson and Sammer (2016) and Otambo (2016). Therefore, the first null hypothesis for this research work is started as thus:

Ho₁: Inflation rate does not affect the financial performance of deposit money banks (DMB) in Nigeria.

Interest Rate and financial performance: - Interest rate is the amount a lender charges for the use of assets expressed as a percentage of the principal. The apex bank in Nigeria left its interest rate benchmark unchanged at 12.5% after trimming it by 100bps. Policy makers in Nigeria assert that the rate cut positively impacted the economy via credit growth (NBS report 2020). Emase (2017), Kanwal and Nadeem (2013) and Otambo (2016) observed that interest rate affects the financial performance of commercial banks while the studies of Babalola (2012), Gonji, Ahan, Zamdayu and Pam, (2020), Kamran, Johnson and Sammer (2016) and Khan, Kausar and Abbas (2018) concluded that interest rate does not affect the financial performance of commercial banks. Hence, the second null hypothesis formulated to ascertain these positions:

Ho₂: Interest rate does not affect the financial performance of DMBs in Nigeria.

Exchange rate and financial performance: -Exchange rate is the rate at which one currency is exchanged for another. Nigerian exchange rate as at August 2020 is ₦380 per dollar (official rate) while the black-market exchange rate is within the range of ₦400 to ₦450 (Central Bank of Nigeria Review, 2020). Outcome of researches on the effect of exchange rate on the financial performance of banks varies. Emase (2017), Gikombo and Mbugua (2018), Gonji, Ahan, Zamdayu and Pam, (2020), and Otambo (2016) discovered that exchange rate is a major determinant of the financial performance of banks while Babalola (2012) discovered that exchange rate does not determine the financial performance of banks. Based on these divergent opinions, this study therefore, states the third null hypothesis as thus:

Ho₃: Exchange rate does not affect the financial performance of DBMs in Nigeria.

Unemployment rate and the financial performance: -Unemployment rate is the percentage of young able men and women who have the requirements to work but don't have work to do. Nigeria has recorded the highest unemployment rate in history, the unemployment rate as at August 2020 is 27.1% (NBS, 2020). This means that at least twenty-seven (27) people in every one hundred (100) Nigerians are jobless. And the number seems to be increasing. Mazreku, Morina, Misiri, Spiteri and Grima (2018) discovered that unemployment positively affects the financial performance of banks while the studies of Ghurtskara (2018), Gonji, Ahan, Zamdayu and Pam, (2020) and Filip (2018) discovered a negating result. In response to these discoveries, the study formulates the fourth null hypothesis:

Ho₄: Unemployment rate does not affect the financial performance of DBMs in Nigeria.

Gross Domestic Product (GDP) and Financial Performance: -GDP is the total value of goods produced and services provided in a country over a period of time (usually one year). The 2020 GDP of Nigeria is the worst for the past ten (10) years. Nigeria's economy contracted by 6.1 % (NBS report, 2020). Some analysts attributed the reason for the contraction to COVID 19 pandemic while others argued that the contraction of Nigeria's GDP started since before the coming of COVID 19 pandemic. Scholars who used GDP to examine the financial performance of organizations came up with different revelations. Some discovered that GDP affects financial performance while others discovered that it does not affect financial performance. Authors that assert that it affects financial performance include; Rahman, Hamid and Khan (2015), Khan, Kausar and Abbas (2015), Gonji, Ahan, Zamdayu and Pam, (2020) and Kamran, Johnson and Sammer (2016) while Ayande, Ekpo and Mustapha (2013) have a contrary view. Therefore, the fifth null hypothesis formulated to test the various positions is.

Ho₅: GDP does not affect the financial performance of DMBs in Nigeria.

THEORETICAL FRAMEWORK: Arbitrage pricing theory (APT)

This theory was proposed by the economist Ross (1976). Basically, the theory emphasized the fact that only a few systematic factors (such as macroeconomic variables) affect the long-term average returns of financial assets (Roll & Roll 1995). They also opined that

the theory does not only accept the numerous factors that affect the daily price differences of individual stocks and bonds, but it also focuses on the forces that move aggregates of assets in large portfolios.

Empirical reviews

Various studies were reviewed on GDP, interest rate, inflation rate, exchange rate and unemployment rate. The studies reviewed are as thus: Ayande, Ekpo and Mustapha (2013) examined the determinants of banks profitability in developing economy from 1980-2010. The researchers used both micro and macro-economic variables to determine the profitability of banks in Nigeria using First bank as a study. Econometric analysis of co-integration and error correction techniques were used to analyze the data obtained from Central Bank of Nigeria. The result of the study revealed that both micro economic variables and macroeconomic variables affect the profitability of banks within the period of investigation. The micro economic variables that significantly determined the profitability of banks are liquidity, labor efficiency, credit risk and capital structure while bank size and cost efficiency did not determine the profitability of banks significantly. Broad money supply growth rate is the only macroeconomic variable that determined the profitability of banks in Nigeria, real GDP and inflation rate did not determined the profitability of banks in a significant way. The proxy used for the micro and macroeconomic variables are return on asset (ROA), return on equity (ROE) and Net Interest margin (NIM).

Emase (2017) studied the effect of macroeconomic factors on the profitability of commercial banks listed at the Nairobi Securities and Exchange in Kenya from 2009- 2016. Using panel data to test the effect of GDP, real interest rate, inflation rate and exchange rate on the profitability (ROA) of listed commercial banks in Kenya, the study revealed that GDP, interest rate and exchange rate significantly affect the profitability of commercial banks in Kenya in a positive and significant way while exchange rate affect the profitability of commercial banks in a negative but significant way.

Rahman, Hamid and Khan (2015) examined the determinants of bank profitability in Bangladesh from 2006- 2013. The researchers used both microeconomic variables and macroeconomic variables as the determinant while return on asset (ROA), net interest margin (NIM) and return on equity are the measurements of profitability. The macroeconomic variables used are non-interest income, credit risk and GDP. The study discovered that the aforementioned macroeconomic variables determined the profitability of banks in a significant way.

Khan, Kausar and Abbas (2015) examined the impact of bank specific and macroeconomic factors on banks profitability of the banking sector in Pakistan from 2011-2015. Inflation, interest rate and GDP are the macroeconomic variables used for the study. Using OLS, the study revealed that among the macroeconomic variables used, only GDP has significant impact on the profitability of banks in Pakistan within the period of the study. This implies that inflation rate and interest rate did not have significant impact on banks profitability.

Babalola (2012) studied the determinants of banks' profitability in Nigeria. The researcher used both macroeconomic variables and firm specific variables as the independent variables while ROA is the dependent variable. The macroeconomic variables used for the study include inflation rate, interest rate, exchange rate, GDP and broad money supply. Using GMM technique via the application of STATA, the study discovered that none of the five macroeconomic variables used in the study significantly determined the profitability of banks.

Alshatti (2016) studied the determinant of banks' profitability in Jordan from 2005-2014. The variables used for the study are Capital adequacy, capital, leverage, assets quality, financial structure, liquidity, return on assets (ROA) and return on equity (ROE). Using E-Views techniques, the researcher discovered that capital adequacy, capital and leverage affect the profitability of banks positively while the effect of assets quality on the profitability of banks is negative.

Kamran, Johnson and Sammer (2016) studied the determinant of profitability of the banking sector in Pakistan from 2005 to 2009. The study used both firm specific factors and macroeconomic factors. Among the three macroeconomic variables used, the study discovered that only GDP affect the profitability of banks in Nigeria, the other macroeconomic variables that were discovered not to significant to profitability by the study are inflation rate and interest rate.

Gikombo, and Mbugua (2018) investigated the effect of selected macroeconomic variables on performance of listed commercial banks in Kenya. The dependent variables are interest rate, GDP, inflation rate and exchange rate while ROA and ROE is the proxy. Using SPSS 23, the researchers discovered that only interest rate, exchange rate and GDP significantly affect the profitability of commercial banks in Kenyan unlike inflation rate which was found not to affect the profitability of banks in Kenya significantly.

Kanwal and Nadeem (2013) examined the impact of macroeconomic variables on the profitability of listed commercial banks in Pakistan from 2001 -2011. Using Pooled Ordinary Least Square (POLS) to examine the impact of inflation rate, GDP and interest rate on ROA, ROE and EM (equity multiplier), the study discovered that the three macroeconomic variables have a negligible impact on the profitability of commercial banks in Pakistan.

Otambo (2016) studied the effect of macroeconomic variables on financial performance of commercial banking sector in Kenya. Using multiply linear regression, the study discovered that interest rate and exchange rate positively affect the financial performance of commercial banks in Kenya while inflation rates and GDP does not.

Ghurtskara (2018) examined the macroeconomic determinants of bank profitability in Georgia from 2003 to 2017. The macroeconomic variables used are unemployment, GDP, foreign direct investment and exchange rate. Using regression analysis, the study discovered that the macroeconomic variable used for the study has weak relationship with banks profitability.

Filip (2014) studied the implications on profitability of banking activity in the context of the Global financial crisis in Romania from 2008- 2013. The dependent variable is ROA while the independent variables are exchange rate, unemployment rate, GDP and inflation rate. The study revealed that the entire macroeconomic variable except exchange rate does not affect the profitability of banks in Romania.

Mazreku, Morina, Misiri, Spiteri & Grima (2018) examined the determinants of the level of non- performing loans in commercial banks of transition countries from 2006- 2016.using GDP, inflation, unemployment and export growth rate as the independent variables while non- performing loan(NPL) is the proxy. Using generalized method of moments (GMM) to analyzed the data obtained from the World bank, the study revealed that GDP growth and inflation negatively but significantly correlated with NPLs while unemployment positively relate to NPLs.

Research gap

The period of the studies reviewed is mostly from the range of 2000 to 2018, this period is not too good for a time series study. This study therefore covered a longer period (29 years). This help to meet up with the requirements of time series analysis which enhance the validity of the study.

2. METHODOLOGY

This study is a time series research; it covered the period of 29 years (1990-2019). A sample size of nine (9) commercial banks listed on Nigerian stock Exchange was used (see appendix). The nine banks used for the study are banks that have been in operation on or before 1990. The study used macroeconomic variables obtained from the review of Central bank of Nigeria for the period under consideration as well as other sources such as National Bureau of Statistics (NBS). The financial data is measured in terms of Nigeria currency (Naira). The study used descriptive research design to explain the characteristics of the variables under consideration. STATA 13 was used for data analysis.

Regression Model

The model used for this study was adopted from Gikombo and Doris (2018) with a little modification. The model was adopted because of its ability to describe the behavior of organizations with regard to their external environment (macroeconomic variables). The modification is in the dependent and independent variables used. The researcher used ROE and ROA as the proxy of GDP, interest rate, inflation rate and exchange rate while this study used ROA as the proxy of GDP, Interest rate, inflation rate, exchange rate and unemployment rate. The model is as thus:

$$Y_{it} = \beta_0it + \beta_1X_{1it} + \beta_2X_{2it} + \beta_3X_{3it} + \beta_4X_{4it} + \beta_5X_{5it} + \epsilon_{it}$$

Where Y= ROA of banks (Financial Performance), α = Constant; X1 = Inflation rates; X2= interest rate; X3= Exchange Rates; X4= unemployment rate and X5= GDP; β_1 , β_2 , β_3 , β_4 and β_5 = Coefficient while ϵ = error term, t = measure of time, i =number of banks observation

Where

$ROA = \text{Profit before tax} / \text{Total Asset}$

$Inflarate = \text{Inflationrate}$

$INTERRATE = \text{Interest rate}$

$EXCHRATE = \text{Exchange rate}$

$UNEMPL = \text{Unemployment rate}$

$GDP = \text{Gross Domestic Product}$

3. RESULT AND DISCUSSION

This section explains the descriptive statistics of the variables used for the study. The descriptive statistics of the dependent and independent variables with minimum, maximum, mean, standard deviation and observation are shown on the tables.

Table 1 *Descriptive Statistics*

	Mean	Std. D	Min	Max	Skewness	Kurtosis
ROA	3.4536	6.4199	-19.79	13.27	-1.4221	6.8947
INFR	18.260	16.893	5.39	72.84	2.0763	6.1583
INTR	19.306	3.7047	13.5	31.65	1.4209	5.3953
EXCR	123.62	93.557	8.04	365.5	0.7879	3.2875
UNER	4.3327	1.4683	3.5	8.389	2.1525	5.8636
GDP	4.559	3.9803	-2.04	15.33	0.4258	3.3283

Source: Researchers Computation, 2020

Table 1 presents the summary of the descriptive statistics for the parameters used specifically Returns on Asset (dependent variable), inflation rate, interest rate, exchange rate, unemployment rate and GDP (independent variables). As can be inferred from the outcome of the result, ROA had an average of 3.4536 ranging between minimum of -19.79 to a maximum of 13.27 with associated dispersion value of 6.4199 which implies that ROA across the industry is significantly dispersed. The skewness and kurtosis value of -1.4221 and 6.8947 also shows that the data is normally distributed.

On the other hand, the result shows that the inflation rate of the banks has a minimum of 5.39 and maximum of 72.84. The average stood at 18.260. The level of dispersion to both sides stood at 16.893 while the skewness and kurtosis of 2.0763 and 6.1583 respectively shows that the data is normally distributed. The interest rate average of 19.306 ranging between minimum of 13.5 to a maximum of 31.65 with associated dispersion value of 3.7047 which implies that interest rate across the industry is significantly dispersed. The skewness and kurtosis value of 1.4209 and 5.39953 also shows that the data is normally distributed.

Exchange rate has an average of 123.62 ranging between minimum of 8.04 to a maximum of 365.5 with associated dispersion value of 93.557 which implies that exchange rate across the industry is significantly dispersed. The skewness and kurtosis value of 0.7879 and 3.2875 also shows that the data is normally distributed. On the other hand, unemployment rate of the banking sector has a minimum of 3.5 and maximum of 8.389 of unemployment. The average stood at 4.3327. The level of dispersion to both sides stood at 1.4683 while the skewness and kurtosis of 2.1525 and 5.8636 respectively shows that the data is normally distributed.

Lastly GDP of the banking sector has a minimum of -2.04 and maximum of 15.33 of GDP. The average stood at 4.559. The level of dispersion to both sides stood at 3.9803 while the skewness and kurtosis of 0.4258 and 3.3283 respectively shows that the data is normally distributed.

Correlation Analysis

Correlation analysis was used to test for multicollinearity among the independent variables as well as the strength of the relationship between dependent and independent variables. The correlation matrix was presented in table 2.

Table 2 *Correlation Test*

	ROA	INFR	INTR	EXCR	UNER	GDP
ROA	1.0000					
INFR	-0.5404 0.0020	1.0000				
INTR	-0.3178 0.0870	0.4885 0.0062	1.0000			
EXCR	0.3951 0.0307	-0.4059 0.0260	-0.5792 0.0008	1.0000		
UNER	0.2294 0.2228	-0.1141 0.5482	-0.3526 0.0560	0.8169 0.0000	1.0000	
GDP	0.0161 0.9326	-0.4566 0.0112	0.0511 0.7887	-0.0270 0.8874	-0.3515 0.0568	1.0000

Source: Researcher Computation, 2020.

The table 2 show the correlation that exist between variables used in the study e.g. returns on asset, inflation rate, interest rate, exchange rate, unemployment rate and GDP. The correlation between ROA, inflation rate interest rate and exchange rate were significant while the correlation between ROA, unemployment rate and GDP were insignificant. Also, the correlation between inflation rate, interest rate, exchange rate and GDP were significant while the relationship between inflation rate and unemployment rate was insignificant.

The correlation between interest rate, exchange rate and unemployment rate were significant while the relationship between interest rate and GDP was insignificant. Exchange rate and unemployment rate have a significant relationship while the relationship between unemployment rate and GDP is insignificant. Lastly, unemployment rate has a significant relationship with GDP.

Table 3

Multicollinearity Test

Variable	VIF	1/VIF
EXCR	5.92	0.169054
UNER	5.06	0.197646
INTR	2.02	0.494981
GDP	2.00	0.498762
INFR	1.98	0.506088

Source: Researcher Computation, 2020.

Also, the study tested for multicollinearity using Variance Inflation Factor (VIF), the result shows absence of multicollinearity among the study independent variables given the value of VIF for inflation rate, interest rate, exchange rate, unemployment rate and GDP to be 1.98, 2.02, 5.92, 5.06 and 2.0 respectively, which is less than 9.6 as suggested by Gujarati (2004). So, the absence of multicollinearity in the study model implies that the coefficient of independent variables can be relying on to predict the degree of influence on dependent variable.

Regression Analysis

Table 4

Test of Hypotheses

Variables	Coef.	Std. Err.	t	P> t
INFR -> ROA	-.2460475	.0842061	-2.92	0.007
INTR -> ROA	.3271559	.3882597	0.84	0.408
EXCR -> ROA	.0330011	.026308	1.25	0.222
UNER -> ROA	-1.336173	1.550215	-0.86	0.397
GDP -> ROA	-.6186903	.3600065	-1.72	0.099
R square 0.4036				
Prob > F 0.0223				

Source: Researcher computation, 2019.

The regression result is presented in the table 4. The result shows R^2 of 0.4039 or 40.4%. This implies that the study independent variables (inflation rate, interest rate, exchange rate, unemployment rate and GDP) accounted for 40.4% variation on the dependent variable (Return on Asset), while the remaining 59.6% can be explained by other variables that are not included in the model. The result of F statistics (p-value 0.00), is significant at 5% level. This implies that the study model is fit.

The coefficient of inflation rate was also discovered to have a negative and significant effect on the financial performance of the banking sector in Nigeria with coefficient value of -.2460475 and p value of 0.007 statistically significant at less than 5%, therefore the first null hypothesis is accepted. The findings reveal that a unit percent rise in the level of inflation rate will bring about -.2460475 decrease in return on assets of insurance companies in Nigeria. The finding of this study is consistent with the findings Kanwal and Nadeem (2013) but negate the findings of Khan, Kauser and Abbas (2015), Ayande, Ekpo and Mustapha (2013), Babalola (2012), Kamran, Johnson and Sammer (2016) and Otambo (2016).

The coefficient of interest rate has a positive and insignificant effect on the financial performance of the banking sector in Nigeria with coefficient value of .3271559 and p value of 0.408 statistically higher than 5%, therefore the second null hypothesis is rejected. The findings reveal that a unit percent rise in the level of interest rate will bring about .3271559 increase in return on assets of insurance companies in Nigeria. The finding of this study is consistent with the findings Babalola (2012) and Kamran, Johnson and

Sammer (2016) but negate the findings of Khan, Kauser and Abbas (2015), Gikombo and Mbugua (2018), Kanwal and Nadeem (2013), Emase (2017) and Otambo (2016).

Exchange rate has an insignificant effect on the financial performance of the banking sector in Nigeria. The coefficient stood at 0.0330 and p value of 0.22 which is greater than 5%, therefore the third null hypothesis is rejected. A unit percent increase (as indicated in the result) will lead to 0.0330 increases in profitability of insurance company in Nigeria. The result of the study is in support with the study of Babalola (2012) but contradict the findings of Gikombo and Mbugua (2018), Otambo (2016) and Emaser (2017).

The coefficient of unemployment rate was also discovered to have a negative and insignificant effect on the financial performance of the banking sector in Nigeria with coefficient value of -1.336173 and p value of 0.387 statistically insignificant; therefore the fourth null hypothesis is rejected. The findings reveal that a unit percent rise in the level of unemployment will bring about 1.336173 increases in return on assets of insurance companies in Nigeria. The finding of this study is consistent with the findings Ghurtskara (2018), Filip (2018) but contradict the findings of Mazreku, Morina, Misiri, Spiteri and Grima (2018).

Lastly, GDP has a negative and significant effect on the financial performance of the banking sector in Nigeria. The coefficient GDP stood at -.6186903 p value of 0.099 statistically significant at less than 10%, therefore the fifth null hypothesis is accepted. The findings reveal that a unit percentage raises in the level of GDP will bring about -.6186903 decrease in return on assets of insurance companies in Nigeria. The finding of this study is consistent with the findings Rahman, Hamid and Khan (2015), Khan, Kauser and Abbas (2015), Kamran, Johnson and Sammer (2016) but negate the findings of Ayande, Ekpo and Mustapha (2013), Babalola (2012) and Otambo (2016).

4. CONCLUSION

Sound financial performance is the main purpose for the establishment of deposit money banks; however, there are some factors that determine their financial performance. Macroeconomic variables are the major factors that determine the financial performance of banks in any country of the world. This study examined some of the macroeconomic factors that determine the financial performance of deposit money banks in Nigeria. Among the macroeconomic variables examined (interest rate, inflation rate, exchange rate, unemployment rate and GDP), the study discovered that only inflation rate and GDP significantly determine the financial performance of banks in Nigeria from 1990-2019. The tool of analysis used for the study is STATA 13. It is a time series study. The data used for the study was obtained from the fact books of the Central Bank of Nigeria (CBN) reviews/fact books and National Bureau of Statistics among others.

Recommendation

The following recommendations were drawn base on the findings and conclusion of the study:

Banks management should make both long and short terms policies that can aid to mitigate the effect of the macroeconomic environment on their financial performance.

Bank management should advice the regulatory body(CBN) on policies that can affect them because whatever negatively affect deposit money banks affect the entire economy.

Regulatory bodies like CBN and NDIC should liaise with the management of deposit money banks in Nigeria to make policies that will not affect the economy negatively.

Government/ regulatory body should make policies that will reduce the rate of inflation in Nigeria in order to boost the financial performance of organizations like banks. They should also make policies that can encourage investments in the country thereby enhance the country's GDP.

Appendix -Names of banks used for the research

S/N	Name of bank
1	Access Bank of Nigeria Plc
2	Ecobank Nigeria Plc
3	First Bank of Nigeria Plc
4	FCMB Plc
5	GTB Plc
6	Union Bank of Nigeria Plc
7	UBA Plc
8	Unity Bank of Nigeria Plc
9	Zenith Bank Plc

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Conflict of Interest

The authors declare no conflicts of interests any matter related to this paper.

Data and materials availability

All related data have been presented in this paper.

Peer-review

External peer-review was done through double-blind method.

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